

HR ANALYTICS

PROBLEM STATEMENT

KPI'S REQUIREMENT

The HR department is responsible for monitoring and managing various aspects of employee data to ensure the organization maintains a healthy workforce. However, there is a lack of clear performance indicators to track and analyze key HR metrics. Therefore, there is a need to design and implement a set of KPIs to address the specific HR problems.



Employee
Count

Attrition
Count

Attrition
Rate

Active
Employees

Average
Age

The HR department lacks visibility into the total number of employees, making it challenging to access workforce size and plan for future growth or downsizing effectively.

Employee
Count

Attrition
Count

Attrition
Rate

Active
Employees

Average
Age

The organization lacks a standardized method to track employee attrition, resulting in incomplete and unreliable data on the number of employees who have left the organization.

Employee
Count

Attrition
Count

Attrition
Rate

Active
Employees

Average
Age

Without a clear measure of attrition rate, the organization cannot access the overall turnover level or compare it with industry benchmark, hindering the ability to gauge employee satisfaction and engagement.

Employee
Count

Attrition
Count

Attrition
Rate

Active
Employees

Average
Age

The organization lacks a mechanism to differentiate between active and inactive employees, leading to difficulties in accurately assessing the current workforce's productivity and capacity.

Employee
Count

Attrition
Count

Attrition
Rate

Active
Employees

Average
Age

The HR department lacks visibility into the average age of employees, making it difficult to evaluate workforce demographics, succession planning, and the organization's ability to attract and retain young talent.



CHART'S REQUIREMENT

Attrition by
Gender

Department-
Wise
Attrition

Number of
Employees
by Age
Group

Job
Satisfaction
Rating

Education
Field-Wise
Attrition

Attrition Rate
by Gender of
Different Age
Groups

The HR department faces challenges in understanding the attrition patterns based on gender, making it difficult to identify any gender-related disparities and implement targeted retention strategies.

Attrition by
Gender

Department-
Wise
Attrition

Number of
Employees
by Age
Group

Job
Satisfaction
Rating

Education
Field-Wise
Attrition

Attrition Rate
by Gender of
Different Age
Groups

The HR department lacks visualization to showcase attrition rates across different departments. This hinders their ability to identify departments with higher attrition rates and address any underlying issues or concerns effectively.

Attrition by
Gender

Department-
Wise
Attrition

Number of
Employees
by Age
Group

Job
Satisfaction
Rating

Education
Field-Wise
Attrition

Attrition Rate
by Gender of
Different Age
Groups

The HR department requires visual representations to analyze the distribution of employees across various age groups. This helps in accessing workforce demographics, identifying and age-related gaps or imbalances, and implementing targeted HR policies or programs.

Attrition by
Gender

Department-
Wise
Attrition

Number of
Employees
by Age
Group

Job
Satisfaction
Rating

Education
Field-Wise
Attrition

Attrition Rate
by Gender of
Different Age
Groups

The HR department lacks visualization to represent job satisfaction ratings, hindering the ability to measure employee engagement and overall job satisfaction levels effectively.

Attrition by
Gender

Department-
Wise
Attrition

Number of
Employees
by Age
Group

Job
Satisfaction
Rating

Education
Field-Wise
Attrition

Attrition Rate
by Gender of
Different Age
Groups

The HR department requires visual representation to analyze attrition rates based on education fields. This helps identify specific educational backgrounds that may be associated with higher attrition, enabling the organization to tailor retention strategies accordingly.

Attrition by
Gender

Department-
Wise
Attrition

Number of
Employees
by Age
Group

Job
Satisfaction
Rating

Education
Field-Wise
Attrition

Attrition Rate
by Gender of
Different Age
Groups

The HR department lacks visualization that displays attrition rates based on gender and different age groups. This makes it challenging to identify any age and gender related attrition trends, preventing the organization from implementing targeted retention strategies for specific employee segments.

Dataset -

<https://www.kaggle.com/datasets/pavansubhasht/ibm-hr-analytics-attrition-dataset>

Tools Used -

- Excel
- SQL
- Power BI
- Tableau